

## WHAT IS CLAIMED IS:

1. A chemical-mechanical polishing pad comprising a porous polymeric material, wherein the porous polymeric material has a Poisson's ratio less than 0.
2. The polishing pad of claim 1, wherein the porous polymeric material has a Poisson's ratio of from about -1 to less than 0.
3. The polishing pad of claim 2, wherein the porous polymeric material has a Poisson's ratio of from about -0.8 to about -0.2.
4. The polishing pad of claim 1, wherein the porous polymeric material is a thermoplastic polymer or a thermoset polymer.
5. The polishing pad of claim 4, wherein the thermoplastic polymer or the thermoset polymer is selected from the group consisting of polyurethanes, polyolefins, polyvinylalcohols, polyvinylacetates, polycarbonates, polyacrylic acids, polyacrylamides, polyethylenes, polypropylenes, nylons, fluorocarbons, polyesters, polyethers, polyamides, polyimides, polytetrafluoroethylenes, polyetheretherketones, copolymers thereof, and mixtures thereof.
6. The polishing pad of claim 5, wherein the thermoplastic polymer or the thermoset polymer is selected from the group consisting of polyurethanes and polyolefins.
7. The polishing pad of claim 1, wherein the polishing pad has a density of about  $1 \text{ g/cm}^3$  or less.
8. The polishing pad of claim 1, wherein the polishing pad has a void volume of about 75% or less.
9. The polishing pad of claim 1, wherein the polishing pad has a pore density of greater than about 10 pores/cm.

10. The polishing pad of claim 1, wherein the porous polymeric material has an average pore diameter of from about 0.1  $\mu\text{m}$  to about 2500  $\mu\text{m}$ .
11. The polishing pad of claim 1, wherein the polishing pad further comprises a polishing surface comprising grooves.
12. The polishing pad of claim 11, wherein the grooves are linear grooves.
13. The polishing pad of claim 11, wherein the grooves are in the form of an XY crosshatch.
14. The polishing pad of claim 1, wherein the polishing pad further comprises an optically transmissive region.
15. The polishing pad of claim 14, wherein the optically transmissive region has a light transmission of at least 10% at one or more wavelengths between from about 190 nm to about 3500 nm.
16. The polishing pad of claim 1, wherein the polishing pad further comprises abrasive particles.
17. The polishing pad of claim 16, wherein the abrasive particles comprise metal oxide selected from the group consisting of alumina, silica, titania, ceria, zirconia, germania, magnesia, co-formed products thereof, and combinations thereof.
18. The method of polishing a workpiece comprising
  - (i) providing a workpiece to be polished,
  - (ii) contacting the workpiece with a chemical-mechanical polishing system comprising the polishing pad of claim 1, and
  - (iii) abrading at least a portion of the surface of the workpiece with the polishing system to polish the workpiece.

19. The method of claim 18, wherein the polishing pad further comprises abrasive particles.

20. The method of claim 19, wherein the abrasive particles comprise metal oxide selected from the group consisting of alumina, silica, titania, ceria, zirconia, germania, magnesia, co-formed products thereof, and combinations thereof.

21. The method of claim 18, wherein the method further comprises detecting *in situ* a polishing endpoint.